

Draft Meeting Notes  
CMARP Delta Levees Work Team Meeting  
September 11, 1998 at 9:00 am in room 1147 C-1 of the Resources Building

**Attendance List:**

Mike Driller, DWR Division of Engineering  
Chuck Howard, US Bureau of Reclamation  
Robert Kayen, US Geological Survey, Menlo Park Office  
Gwen Knittweis, CALFED (chair)  
Art McGarr, US Geological Survey, Menlo Park Office  
Chris Neudeck, KSN Engineering  
Kent Nelson, DWR Environmental Services Office  
Michael Norris, DWR Central District (minutes)  
Michael Ramsbotham, Corps of Engineers / CALFED

Gwen Knittweis convened the meeting and had the group introduce themselves.

Gwen discussed the matter regarding the importance of horizontal and vertical datum that had been discussed at the prior meeting. The matter could be elevated to a policy issue. The matter will also be an agenda item at the next CALFED Levees and Channel Technical Team meeting.

Gwen thought the CMARP group should reference the issue regarding horizontal and vertical datum but she didn't think CMARP should take on the issue directly. Gwen wondered how we make the locals tie into the new horizontal and vertical datum and Chris Neudeck said the agencies (such as DWR) should require it with the submittals from the locals. As an example, Chris noted that CalTrans requires surveys to be in metric.

Gwen concluded the discussion on horizontal and vertical datum by stating that she might take a stab at writing an "issue paper".

The next agenda item dealt with the draft template for the outline. Kent Nelson distributed a handout that lists the major topics of "Monitoring Objectives" and "Conceptual Model and/or Listing of Hypotheses and Assumptions of the System". Each major topic has several sub-topics. Kent wants to refer to attachments that represent each person's contribution to the study effort rather than trying to merge everyone's comments into one idea. Kent needs help with "research elements and links". Kent and Gwen asked for people's comments to be sent to the reflector e-mail address [cmarp@sl01dcaser.wr.usgs.gov](mailto:cmarp@sl01dcaser.wr.usgs.gov). Kent suggested 3 days as the time period for reviewing a document that is posted on the reflector e-mail site. Gwen stressed the September 30, 1998 deadline for printing a document from the CMARP sub-team.

The next agenda item dealt with Levee Cross Section Compliance. A draft handout written by Dave Lawson from DWR Central District was distributed to the group. Gwen referred also to another handout that listed the AB360 requirements for habitat that DWR wants to see in the

submittals from the locals. Gwen thought the background information is there on the DWR Central District write-up but more detail is needed. Chris Neudeck felt that "bathymetric and waterside work" should be added as an item. It was noted that there is no requirement that bathymetric data be collected in channels. Gwen noted that, although there is a CALFED Levee and Channel Technical Team, many felt that "channels" issues are not really being addressed. Gwen felt that the channels issue is probably more closely aligned with the CALFED Storage and Conveyance program rather than the Levee Program but she is not aware that any other CMARP design group is addressing the issue and is concerned that it could end up not being addressed at all.

Rob Kayen was aware of one resource at his Menlo Park office that is looking at a issue related to bathymetry. Rob was willing to put together a write-up on horizontal and vertical control (in addition to Chris Neudeck's write-up) and the various techniques that are available for bathymetry mapping. Kent will add the bathymetry issue to his outline.

Chris and Kent discussed whether the PL84-99 and HMP requirements should be integrated into the discussion paper. Chris said that the \$66 million in levee work that has been done in the Delta over the last 10 years was the result of financial incentive to the locals. Chris referred to the HMP requirement that provided disaster assistance funding if the locals met the HMP requirement. Chris said we need a financial incentive to the locals for the \$1 billion that is being proposed for Delta levees work if we expect the locals to cost-share up to 25 percent.

The next agenda item dealt with the Environmental Monitoring Component. There was reference to a handout from Kent Nelson that was distributed at the previous meeting. It was noted that "Delta Levees Environmental Protection" in Kent's handout should be reworded to read "Delta Levees Environmental Mitigation". The "Delta Levees Environmental Enhancement" section will be tied into the CALFED Environmental Restoration Program Plan (ERPP). Gwen referred again to the handout that listed the AB360 requirements for habitat. This outline should be merged with the "Delta Levees Environmental Mitigation" section. Kent said another item that could be added to the "Delta Levees Environmental Mitigation" section could be the effort to save Delta Channel Islands.

The next agenda item dealt with the Seismic Monitoring Element. Mike Driller passed out a handout. Mike said that "dynamic response characteristics of delta organic soils", "earthquake shaking in the Delta", and "geotechnical and geological information" are the three items under the "What" heading that he feels are important in this study effort. Mike wasn't sure if geotechnical and geological information falls under "monitoring" or "research". There was discussion of "source characteristics" in regards to delta seismicity. As an example, it was noted that discussions of whether or not the Coast Range Sierra Block Fault really exists and how this affects whether or not a 6.5 magnitude Delta earthquake could occur as opposed to something much smaller if it doesn't exist. There was discussion of ongoing studies by Jeff Unruh and Norm Abrahamson. Rob Kayen suggested that "microseismicity" and "microreflectivity" issues should be investigated as they relate to Delta seismicity. Also, "refraction modeling" as it relates to the juxtaposition of fracture blocks should be looked at. Michael Ramsbotham wondered if

some of the things being discussed were more along the lines of "research" rather than "modeling" and how deeply we should delve in them with our deadline coming up. Ramsbotham suggested expanding the three items listed under the "What" heading to start with and then outlining what needs to be done. Rob Kayen finished the discussion on this topic by noting he would try and put together a seismic package by 9-17-98.

The next agenda item dealt with the Linkages issue. Gwen said we need to identify all areas where things might overlap with other CMARP efforts. Kent suggested a "Links" section on each attachment although Rob Kayen suggested "cutting and pasting" a summary of Links in the main document. Art McGarr thought that more Links would evolve after the first draft is finished.

Kent Nelson wondered where the "cost element" issue should be discussed in the template and it was thought it related to item III under Monitoring Plan Elements. There was discussion of assigning costs to the elements. Gwen floated 10 percent as a cost but Kent said he would reference AB360 percentage costs towards mitigation. Each of the 18 CMARP sub-teams may have to do something similar.

The next agenda item dealt with the Inventory issue and Gwen passed out a one-page handout from the San Francisco Estuary Project. Chris Neudeck questioned the value of diving too deeply into this issue because we already have sufficient knowledge within the group. Chris questioned whether this effort was being done too soon when we don't even know yet whether or not we have a program. Gwen thought it was useful because it's a search of what's already there but Chris thought that it couldn't provide us with any valuable information given the little time that is left. Kent concluded the discussion of this item by noting we shouldn't dismiss the idea of researching what's already there but now is not the time.

Gwen scheduled the next meeting of the CALFED Comprehensive Monitoring Assessment Research Program (CMARP) Levee and Channel Sub-Team for Tuesday September 28, 1998 at 1:00 pm.

cmarp91198.min